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APPLICATION	NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/610,503	3	06/30/2003	J. Michael Drake	03-181	5319	
719	7590	09/10/2004		EXAMINER		
CATERPILLAR INC.					HN H	
	100 N.E. ADAMS STREET PATENT DEPT.				PAPER NUMBER	
PEORIA	, IL 61629	6490		2863		
				DATE MAILED: 09/10/2004	DATE MAILED: 09/10/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/610,503	DRAKE ET AL.				
Office Action Summary	Examiner	Art Unit				
•	John H Le	2863				
The MAILING DATE of this communication a Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION  Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a recommendation of the period for reply is specified above, the maximum statutory perions to reply within the set or extended period for reply will, by stated any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a re- reply within the statutory minimum of thirty od will apply and will expire SIX (6) MON' tute, cause the application to become AB.	ply be timely filed  (30) days will be considered timely.  (HS from the mailing date of this communication  ANDONED (35 U.S.C. § 133).	n.			
Status						
1) Responsive to communication(s) filed on						
	his action is non-final.					
,—	,					
Disposition of Claims						
<ul> <li>4a) Of the above claim(s) is/are withd</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☒ Claim(s) <u>1-7 and 10-14</u> is/are rejected.</li> <li>7) ☒ Claim(s) <u>8 and 9</u> is/are objected to.</li> </ul>	<ul> <li>✓ Claim(s) 1-7 and 10-14 is/are rejected.</li> <li>✓ Claim(s) 8 and 9 is/are objected to.</li> </ul>					
Application Papers						
9) ☐ The specification is objected to by the Exam 10) ☑ The drawing(s) filed on 30 June 2003 is/are: Applicant may not request that any objection to t Replacement drawing sheet(s) including the corn 11) ☐ The oath or declaration is objected to by the	a)⊠ accepted or b)⊡ object he drawing(s) be held in abeyan rection is required if the drawing(	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(c	d).			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documed 2. Certified copies of the priority documed 3. Copies of the certified copies of the papplication from the International Burn * See the attached detailed Office action for a line of the papplication from the line of the papplication for a line of the papplication from the line of the papplication for a line of the papplication from the line of the papplica	ents have been received. ents have been received in A riority documents have been eau (PCT Rule 17.2(a)).	oplication No received in this National Stage				
Attachment(s)	_					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>		ummary (PTO-413) )/Mail Date				
<ul> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date <u>06/30/2003</u>.</li> </ul>		formal Patent Application (PTO-152)				

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#### **DETAILED ACTION**

## Claim Objections

1. Claim 4 is objected to because of the following informalities:

Claim 4, line 4, before "wherein", "and and" should change to -and--.

Appropriate correction is required.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-7 and 10-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Lueschow et al. (USP 6,552,279).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

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Regarding claim 1, Lueschow et al. disclose a method for dynamically measuring a payload weight for a machine having at least one cylinder for elevating a payload carrier, the cylinder being connected to a fluid circuit having an actuating fluid (Abstract), comprising: determining a calibration weight associated with the payload carrier (Col.4, lines 7-21); determining an uncompensated payload weight (Col.6, lines 36-52); determining a temperature gain associated with the actuating fluid in response to at least the calibration weight (e.g. Fig.6, Col.4, lines 35-44, lines 54-62, Col.8, lines 36-53) and the uncompensated payload weight (Col.7, lines 3-10); and determining the payload weight in response to at least the uncompensated payload weight and the temperature gain (Col.36-Col.7, line 10, Col.8, lines 36-53).

Regarding claim 2, Lueschow et al. disclose determining the calibration weight includes: lifting a first payload having a first payload weight; sensing a first plurality of pressure values of the actuating fluid during the lifting of the first payload; lifting a second payload having a second payload weight; and sensing a second plurality of pressure values of the actuating fluid during the lifting of the second payload (Col.5, lines 2-10, 33-40, Col.10, lines 51-58).

Regarding claim 3, Lueschow et al. disclose determining the uncompensated payload weight includes: lifting a third payload having a third payload weight; and sensing a third plurality of pressure values of the actuating fluid during the lifting of the third payload (Col.6, lines 7-35, Col.10, line 61-63).

Regarding claim 4, Lueschow et al. disclose establishing a first temperature of the actuating fluid associated with the calibration weight (Col.4,

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lines 54-63); and wherein the temperature gain associated with the actuating fluid is determined in response to at least the first temperature of the actuating fluid (Col.4, lines 35-44).

Regarding claim 5, Lueschow et al. disclose establishing a second temperature of the actuating fluid associated with the uncompensated payload weight; and wherein the payload weight is determined in response to at least the second temperature (Col.7, lines 3-10).

Regarding claim 6, Lueschow et al. disclose a method for dynamically measuring a payload weight for a machine having at least one cylinder for elevating a payload carrier, the cylinder being connected to a fluid circuit having an actuating fluid (Abstract), comprising: determining a calibration weight associated with the payload carrier (Col.4, line 63-Col.5, line 6); determining a calibration temperature of the actuating fluid associated with the calibration weight (Col.4, lines 54-62); determining an uncompensated payload weight (Col.6, lines 36-52); scaling the calibration temperature by a scaling function of the uncompensated payload weight and the calibration weight (Col.7, lines 3-17); and determining the payload weight as a function of at least the uncompensated payload weight and the scaled calibration temperature (Col.6, line 36-Col.7, line 17).

Regarding claim 7, Lueschow et al. disclose the scaling function comprises a ratio of the uncompensated payload weight to the calibration weight (Col.6, lines 50-57).

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Regarding claim 10, Lueschow et al. disclose determining the calibration weight includes: lifting a first payload having a first payload weight; sensing a first plurality of pressure values of the actuating fluid during the lifting of the first payload; lifting a second payload having a second payload weight; and sensing a second plurality of pressure values of the actuating fluid during the lifting of the second payload (Col.5, lines 2-10, 33-40, Col.10, lines 51-58).

Regarding claim 11, Lueschow et al. disclose step of determining the calibration temperature includes: sensing a first lift temperature of the actuating fluid during a first lift; sensing a second lift temperature of the actuating fluid during a second lift (Col.5, lines 6-8, 35-38, 48-53); averaging the first lift temperature and the second lift temperature (Col.5, line 59-Col.6, line 6); and establishing the calibration temperature in response to the average (Col.5, line 59-Col.6, line 6).

Regarding claim 12, Lueschow et al. disclose determining the uncompensated payload weight includes: lifting an unknown payload weight (Col.6, lines 39-45); and sensing a plurality of pressure values of the actuating fluid during the lifting of the unknown payload weight (Col.6, lines 39-45).

Regarding claim 13, Lueschow et al. disclose an apparatus for dynamically measuring a payload weight for a machine having at least one cylinder for elevating a payload carrier, the cylinder being connected to a fluid circuit having an actuating fluid (Abstract), comprising: calibration means for determining a calibration weight associated with the payload carrier; temperature means (temperature sensor 25) for determining a first and second temperature of

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the actuating fluid (Col.3, lines 46-55, Col.5, lines 48-54); payload means for determining an uncompensated payload weight (Col.6, lines 37-52); and compensating means for determining the payload weight (Col.4, lines 45-58).

Regarding claim 14, Lueschow et al. disclose the compensating means comprises: scaling means for adjusting the first temperature as a function of the calibration weight and the uncompensated payload weight (Col.7, lines 3-57); and calculating means for determining the payload weight as a function of the uncompensated payload weight, the scaled temperature, and the second temperature (Col.4, lines 22-44, Col.5, lines 17-24).

### Allowable Subject Matter

4. Claims 8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

In combination with other limitations of the claims, the cited prior arts fails to teach steps of determining a current temperature of the actuating fluid associated with the uncompensated payload weight; and wherein the payload weight is determined as a function of at least the current temperature, as recited in claim(s) 8.

#### Contact Information

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John H Le whose telephone number is 571-272-2275. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John H. Le

Patent Examiner-Group 2863

August 31, 2004

Supervisory Patrint Examiner